

ABSTRACTANTENNA ASSEMBLY

5 The invention provides a dual-access antenna fabricated on a substrate. In one embodiment, the antenna includes a first monopole element (14, 42), at least one grounded parasitic element (20; 48, 50) located proximate the first monopole element (14, 42), wherein the separation between the monopole and the grounded parasitic element exhibits a conductive profile (20, 46) which varies the waveguide characteristics of the antenna
10 assembly. The conductive profile is provided by a stepped or angled profile on the or each grounded parasitic element (20) which faces and extends away from first monopole element (14). This antenna covers the frequency range 900 to 2300 MHz. The antenna includes a secondary grounded element located at an outer position relative to the or an associated grounded parasitic element. In a preferred embodiment, the antenna includes
15 two grounded parasitic elements (20) located on opposite sides of the first monopole element. To provide dual-access communication, the antenna includes a second monopole element positioned so that there is little or no coupling or interference. This secondary monopole is adapted for communications in the 2.4 – 2.5 GHz band. The invention is particularly suitable for small devices communicating at a broad range of frequencies
20 where a small form-factor wideband antenna is required.